

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
SHERMAN DIVISION**

AMERICAN PATENTS LLC,

Plaintiff,

v.

LG ELECTRONICS INC., LG  
ELECTRONICS U.S.A., INC., LG  
ELECTRONICS MOBILECOMM U.S.A.,  
INC., and LG ELECTRONICS  
ALABAMA, INC.,

Defendants.

CIVIL ACTION NO. 4:18-cv-673-ALM

**JURY TRIAL DEMANDED**

**AMERICAN PATENTS' OPPOSITION TO LG'S MOTION TO DISMISS UNDER  
FEDERAL RULE OF CIVIL PROCEDURE 12(b)(6)**

## TABLE OF CONTENTS

I. INTRODUCTION.....	1
II. LEGAL STANDARD FOR MOTIONS TO DISMISS UNDER RULE 12(b)(6) .....	2
III. AMERICAN PATENTS SUFFICIENTLY PLEADED DIRECT INFRINGEMENT .....	3
A. The Direct Infringement Allegations Meet the Pleading Requirements .....	3
B. LG’s Additional Arguments Regarding the ‘655 Patent and the ‘090 Patent Are Unpersuasive.....	6
IV. THE WELLS PATENTS ARE VALID UNDER SECTION 101 .....	8
A. The Wells Patents Are Not Directed to an Abstract Idea Under Step 1.....	8
B. The Wells Patents Disclose Several Inventive Concepts Under Step Two .....	13
C. LG Inappropriately Analyzes Only One Claim Per Patent .....	14
D. LG’s Cases are Inapposite.....	15
E. Fact Issues Preclude Dismissal on the Pleadings .....	15
V. AMERICAN PATENTS SUFFICIENTLY PLEADED INDIRECT INFRINGEMENT .....	16
VI. AMERICAN PATENTS SUFFICIENTLY PLEADED WILLFULNESS.....	20
A. American Patents Plausibly Alleged That LG Intentionally Infringed .....	20
B. Pre-Suit Knowledge Is Not Required to State a Claim for Willfulness .....	21
C. Even If Pre-Suit Knowledge Is Required, It Was Adequately Alleged Here .....	22
VII. IF NECESSARY, LEAVE TO AMEND SHOULD BE GRANTED.....	23
VIII. CONCLUSION.....	24

## **I. INTRODUCTION**

American Patents’ original complaint in this case alleged that LG infringed five patents.<sup>1</sup> LG has moved to dismiss the complaint for failure to state a claim of direct and indirect infringement, for patent ineligibility under Section 101, and for failure to state a claim of willful infringement.

LG’s challenge to American Patents’ direct and indirect infringement allegations should be rejected. As to direct infringement, American Patents alleged infringement of specific claims by specific LG products, providing cites to LG websites showing accused products. American Patents alleged that LG’s products meet each element of specific claims. And American Patents identified certain features of the accused instrumentalities involved in the infringement. As to indirect infringement, American Patents plausibly alleged knowledge of the patents both from the filing of the suit and earlier. American Patents specifically pleaded that LG induced infringement by, among other things, distributing instructions that guide users to use the products in an infringing manner. And American Patents also specifically pleaded that the accused products have special features that have no substantial use other than uses that infringe the asserted patents, providing examples of such features. These allegations provide fair notice of American Patents’ claims against LG and the grounds on which they rest, thereby putting LG on notice as to what it must defend.

LG’s challenge to American Patents’ willfulness allegations should also be rejected. Contrary to LG’s arguments, pre-suit knowledge of the asserted patents need not be alleged to

---

<sup>1</sup> The five asserted patents are U.S. Patent Nos. 7,373,655 (“the ‘655 Patent”), 7,934,090 (“the ‘090 Patent”), 8,668,584 (“the ‘584 Patent”), 9,116,543 (“the ‘543 Patent”), and 9,606,674 (“the ‘674 Patent”).

state a claim for willfulness. And even if pre-suit knowledge were required, the complaint sufficiently alleges willfulness.

Finally, LG's two-and-a-half-page challenge under Section 101 should also be rejected, as the Wells Patents are not directed to an abstract idea and provide an inventive concept under *Alice*.

## **II. LEGAL STANDARD FOR MOTIONS TO DISMISS UNDER RULE 12(b)(6)**

A motion to dismiss under Rule 12(b)(6) is a “purely procedural question,” so the Federal Circuit applies the law of the regional circuit. *CoreBrace LLC v. Star Seismic LLC*, 566 F.3d 1069, 1072 (Fed. Cir. 2009). In the Fifth Circuit, such motions “are viewed with disfavor and are rarely granted.” *Lormand v. U.S. Unwired, Inc.*, 565 F.3d 228, 232 (5th Cir. 2009).

Rule 8(a) requires only a “short plain statement of the claim” sufficient to give the defendant fair notice of what act is being accused. Fed. R. Civ. P. 8(a). In deciding a motion to dismiss for failure to state a claim, the Court must accept all well-pleaded factual allegations as true and interpret the complaint in the light most favorable to the plaintiff. *Snow Ingredients, Inc. v. SnoWizard, Inc.*, 833 F.3d 512, 520 (5th Cir. 2016). Despite the facial simplicity of these requirements, the Supreme Court explained in *Bell Atl. Corp. v. Twombly* that the plaintiff must allege “enough facts to state a claim to relief that is plausible on its face.” 550 U.S. 544, 570 (2007). The plausibility standard, however, “is not akin to a ‘probability requirement,’ but it asks for more than a sheer possibility that a defendant has acted unlawfully.” *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009). In general, the standard “simply calls for enough facts to raise a reasonable expectation that discovery will reveal evidence of [the claim].” *Twombly*, 550 U.S. at 545.

A complaint for direct patent infringement “must explicitly plead facts to plausibly support the assertion that a defendant ‘without authority, makes, uses, offers to sell, or sells any

patented invention during the term of the patent.” *Uniloc USA, Inc. v. Avaya Inc.*, No. 6:15-CV-01168-JRG, 2016 WL 7042236, at \*2 (E.D. Tex. May 13, 2016).

### III. AMERICAN PATENTS SUFFICIENTLY PLEADED DIRECT INFRINGEMENT

#### A. The Direct Infringement Allegations Meet the Pleading Requirements

American Patents has met the *Twombly* and *Iqbal* pleading requirements to support a plausible claim of direct infringement. LG argues, wrongly, that American Patents has not met those requirements for any of the asserted patents because the infringement allegations do not spell out in detail how claim elements map to the accused products. (Mtn. at 6-8, 10-11). For example, with respect to the ‘655 Patent and the ‘090 Patent, LG complains that “the complaint makes no attempt to match the component pieces of the claim to elements of the accused products.” *Id.* at 6. Likewise, for the ‘584 Patent, the ‘543 Patent, and the ‘674 Patent, LG argues that “the complaint does not include any factual allegations about what the specific motion sensing device, location sensing device, and controller are.” *Id.* at 11.

From these arguments, it is apparent that even a probability standard would not satisfy LG, much less the plausibility actually required by *Twombly*. It seems that nothing short of element-by-element infringement contentions *actually proving* infringement would be enough to satisfy LG at the pleadings stage.

But this is not what the law requires. *Uniloc USA*, 2016 WL 7042236 at \*2. If an element-by-element analysis were required, the Local Patent Rules requiring infringement contentions would be superfluous. *Id.* While this Court has not announced “a floor for the direct infringement standard,” it has held that the pleading requirement is met where the plaintiff: (1) alleges a specific product infringes a specific claim; (2) alleges the product meets all the elements of a specific claim; and (3) incorporates by reference a website illustrating the accused

product. *Dynocom Indus. v. Mainline Automotive Equip. Pty. Ltd.*, No. 2:16-cv-00553, Dkt. No. 45, at 4 (E.D. Tex. Feb. 14, 2017).

Here, American Patents has provided all of this, and more. LG cannot credibly claim that it does not know what the claim is and what it has to defend. Indeed, American Patents' allegations against LG go well beyond what this Court found sufficient in *Dynocom*. For instance, as to each of the patents, American Patents has:

- (a) alleged that specific LG products infringe specific claims (*see, e.g.*, Dkt. 1 at ¶¶ 18, 19, 30, 31 (identifying the LG G7 ThinQ as a specific product that infringes Claim 5 of the '655 Patent and Claim 1 of the '090 Patent); and ¶¶ 41, 42, 52, 53, 63, 64 (identifying the LG G7 ThinQ as a specific product that infringes Claim 1 of the '584 Patent, Claim 1 of the '543 Patent, and Claim 1 of the '674 Patent));
- (b) alleged that those LG products meet each element of specific claims (*see, e.g.*, Dkt. 1 at ¶¶ 20-24, 32-35 (allegations regarding each element of Claim 5 of the '655 Patent and Claim 1 of the '090 Patent); and ¶¶ 43-46, 54-57, 65-68 (allegations regarding each element of Claim 1 of the '584 Patent, Claim 1 of the '543 Patent, and Claim 1 of the '674 Patent));
- (c) incorporated by reference websites illustrating the accused LG products (*see, e.g.*, Dkt. 1 at ¶¶ 18, 30, 41, 44, 45, 46, 52, 55, 56, 57, 63, 66, 67, 68 (referencing, as sources, <https://www.lg.com/us/mobile-phones/g7-thinq>, <https://www.lg.com/us/support-mobile/lg-LGG710PM>, <https://www.lg.com/us/mobile-phones/g7-thinq/specs>, and <https://www.lg.com/us/support/product-help/CT10000027-1396394190468-features#>));
- (d) included screenshots to help identify the accused products involved in LG's infringement (*see, e.g.*, Dkt. 1 at ¶¶ 18, 30, 41, 44, 45, 46, 52, 55, 56, 57, 63, 66, 67, 68 (screenshots of the LG G7 ThinQ products and of materials describing them)); and
- (e) identified features of the accused products involved in LG's infringement (*see, e.g.*, Dkt. 1 at ¶¶ 18, 30, 41, 52, 63 (identifying "allow[ing] for initiation and/or control of Internet streamed content," and "allow[ing] for advanced virtual input" of the accused products involved in the infringement)).

As the preceding paragraphs show, American Patents has more than satisfied Rule 8's requirements for "a short and plain statement of the claim showing that the pleader is entitled to relief." Fed. R. Civ. P. 8(a)(2). American Patents is only required to present "enough fact[s] to raise a reasonable expectation that discovery will reveal" that LG is liable for patent infringement. *See Twombly*, 550 U.S. at 556; *see also Disc Disease Solutions Inc. v. VGH Solutions, Inc.*, 888 F.3d 1256, 1260 (Fed. Cir. 2018) (reversing dismissal of complaint where allegations "specifically identified the three accused products" and alleged that the products "meet 'each and every element of at least one claim'"); *Salazar v. HTC Corp.*, No. 2:16-cv-01096-JRG-RSP, 2018 WL 1310007 at \*2 (E.D. Tex. Feb. 14, 2018) ("this Court has previously recognized that an allegation a specific accused product or system infringes a patent is sufficient to meet the pleading requirements of the rules, and a plaintiff need not allege what specific components, features, or capabilities infringe"), *adopted*, 2018 WL 1306615 (Mar. 13, 2018).

LG attempts to distinguish the Federal Circuit's decision in *Disc Disease*, arguing that because the technology in the present case is more complicated than the inflatable spinal brace in *Disc Disease*, more detailed infringement allegations are required here. (Mtn. at 7-8) (citing *Disc Disease*, 888 F.3d at 1260). Even if that were so, the infringement allegations for one patent in *Disc Disease*, which the Federal Circuit held were sufficient, consisted entirely of an attached picture and two paragraphs with little detail:

14. The infringing acts include, but are not limited to, using, causing to be used, making, causing to be made, importing, causing to be imported, offering to sell, causing to be offered for sale, selling, and/or causing to be sold, products, including an inflatable belt for use with support panels and marketed as the "DBB 3500", that *infringe at least one claim of the '113 Patent* in this judicial district and elsewhere within the United States.

15. Defendants are liable for infringement of the '113 Patent pursuant to 35 U.S.C. § 271. By way of example, and without limitation, Defendants products, including the DBB 3500 *meet each and every*

*element of at least one claim of the ‘113 Patent, either literally or equivalently.* A non-limiting example of such product is shown in the photograph of the packaging of the DBB 3500 attached as Exhibit C.

(Ex. 1, Disc Disease Complaint at ¶¶ 14-15) (emphasis added). Here, as noted above, American Patents has gone above and beyond what was found sufficient in *Disc Disease* by providing over thirty paragraphs of allegations against specific products (with pictures), claims, and claim elements, and by providing notice of features of the accused products involved in LG’s infringement. LG cites no authority to support its contention that additional, specific elaboration is required. LG’s contrary arguments are nothing more than attempts to force American Patents to prove its case on the pleadings. *See Marking Object Virtualization Intelligence, LLC v. Hitachi Ltd.*, No. 2:16-cv-01055-JRG, Dkt. 88, slip op. at 5 (E.D. Tex. Sep. 25, 2017) (“At this stage in the case, the plaintiff is not required to provide an exposition of his legal argument.”) (internal quotes omitted); *Uniloc USA, Inc. v. Avaya Inc.*, No. 6:15-CV-01168-JRG, 2016 WL 7042236, at \*3 (E.D. Tex. May 13, 2016) (concluding that the identification by name of accused products, description of the accused functionality within the products, and the accused functionality were sufficient to support a reasonable inference the defendant was liable for direct infringement of the asserted claims, and that “[r]equiring more would improperly and unfairly elevate the plausibility standard to a probability standard”).

B. LG’s Additional Arguments Regarding the ‘655 Patent and the ‘090 Patent Are Unpersuasive

LG appears to argue that the complaint’s allegations are insufficient because LG believes it does not infringe—a belief that is, of course, irrelevant at this stage. For example, LG argues that the complaint’s allegations regarding the ‘655 Patent and the ‘090 Patent are insufficient because “LG does not sell devices possessing the features depicted in the complaint,” referring to the Google Home application and the Google Chromecast device. (Mtn. at 9-10). LG is simply



incorrect because LG *does* sell the devices that American Patents *did* accuse, the LG G7 ThinQ. And those LG G7 ThinQ phones run on the Android operating system, which is specifically designed to work with and stream to Google Chromecast devices (or televisions with built-in Chromecast), whether or not the Google Home application is installed, in a manner that infringes Claim 5 of the ‘655 Patent and Claim 1 of the ‘090 Patent.

LG also argues that the complaint’s direct infringement allegations as to the ‘655 Patent and ‘090 Patent are flawed because LG thinks the only alleged act of infringement was selling. (Mtn. at 8). LG says this is a problem because the exemplary claims from those patents in the complaint are method claims, yet “[t]he complaint does not allege that LGE itself performs the patented methods using the accused products.” (*Id.* at 8, 9). LG is wrong for at least two reasons.

First, American Patents does allege that LG itself performs that patented methods using the accused products. LG is not just accused of infringement by selling. Rather, the complaint alleges that “LG has infringed” those two patents “by making, having made, *using*, importing, providing, supplying, distributing, selling, *or* offering for sale systems utilizing a method.” (Dkt. 1 at ¶¶ 20, 32) (emphasis added). Allegations that LG “uses” the accused products to infringe identified method claims are necessarily allegations that LG performs the methods recited in those claims using the accused products. *See CreAgri, Inc. v. PinnacLife, Inc.*, 2013 WL 11569, \*2 (N.D. Cal. 2013) (denying motion to dismiss direct infringement claim of a method patent because pleading the use of an accused product was sufficient to imply performance of the claimed method) (citing *Lucent Technologies, Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1318 (Fed. Cir. 2009)).

Second, American Patents’ infringement allegations are not limited to infringement of method claims. American Patents alleges infringement of both the ‘655 Patent and the ‘090

Patent *generally*, not just infringement of the exemplary claims (Claim 5 of the ‘655 Patent and Claim 1 of the ‘090 Patent). (Dkt. 1 at ¶¶ 18, 19, 26, 27, 30, 31, 37, 38). Those patents include multiple apparatus claims that are infringed by LG’s “making, having made, importing, providing, supplying, distributing, selling, or offering for sale” the accused products, as well as by LG’s use of the accused products. So it makes sense for American Patents to have alleged those infringing acts as well.

#### **IV. THE WELLS PATENTS ARE VALID UNDER SECTION 101**

In just two-and-a-half pages of briefing, LG brazenly attempts to invalidate three United States patents on a motion to dismiss. Without citing a single case that extends Section 101 to device patents like the Wells Patents, LG offers a completely novel and unique argument—that patents involving at least three specific hardware elements that solve problems of the prior art by using a specific way of locating, identifying, and tracking objects in 3D space are somehow not eligible for patentability. (Mtn. at 12-14). LG’s argument is incorrect for at least five reasons: (1) these patents are not directed to an abstract idea under Step 1 of *Alice*, (2) these patents provide an inventive concept under Step 2 of *Alice*, (3) LG inappropriately analyzes only one claim per patent, (4) LG’s cited cases are inapposite, and (5) fact questions preclude dismissal at the pleadings stage.

##### **A. The Wells Patents Are Not Directed to an Abstract Idea Under Step 1**

Under *Alice* step one, the Wells Patents are clearly not directed to an abstract idea. To come to the opposite conclusion, LG conducts an erroneous analysis that ignores the specifics of the claim language, overgeneralizes the Wells Patents, and misapplies the relevant legal standard—all in violation of controlling Federal Circuit precedent. (Mtn. at 12-14). Under LG’s reading of the law, virtually every invention of the electronic age—including robots and self-

driving cars—are directed to an abstract idea. LG also ignores important Federal Circuit cases finding that the kinds of devices claimed by the Wells Patents are not based on abstract ideas. *See, e.g., Trading Techs. Int’l, Inc. v. CQG, Inc.*, 675 Fed. Appx. 1001, 1004 (Fed. Cir. 2017) (claims “directed to improvements in existing graphical user interface devices” were not directed to an abstract idea); *Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1301 (Fed. Cir. 2016) (claims “tied to a specific structure of various components (network devices, gatherers, ISMs, a central event manager, a central database, a user interface server, and terminals or clients)” were not directed to an abstract idea); *see also Core Wireless Licensing S.A.R.L. v. LG Electronics, Inc.*, 880 F.3d 1356, 1362 (Fed. Cir. 2018) (claims “directed to an improved user interface for computing devices” were not directed to an abstract idea).

In addition, LG ignores the prosecution histories of the Wells patents. None of the Wells patents or any of the parent or grandparent applications leading to the Wells patents were subjected to Section 101 rejections before the Patent Office. For patents that LG asserts are so undeniably abstract that they can be invalidated on a motion to dismiss, surely the Patent Office would have issued at least one prior rejection of them under 101. Moreover, two out of the three Wells patents issued well *after* the *Alice* decision (the ‘543 Patent issued in August of 2015, and the ‘674 Patent issued in March of 2017), so it cannot be said that the examiner was unaware of the relevant law.

Instead of being “directed to” an abstract idea, the Wells Patents are directed to providing a technological solution to problems found in the prior art. The “Background” sections of the Wells Patents discuss limitations found in prior art machines designed to “interact” with human beings. In the prior art, such interaction was limited to the use of electromechanical switches and touch-screens that were attached to the machine. Both of those types of prior art human-machine

interaction are subject to limitations. Specifically, the size of the interaction area in the prior art is limited by the size and shape of the machine and the size and shape of any display screen. ('584 Patent at 1:46-51, 55-58). Also, the interaction area could not make use of available three-dimensional space surrounding the machine or any non-planar or discontinuous surfaces of the machine. *Id.* The Wells Patents solved these problems of the prior art by providing a specific technological solution: the use of two separate sensors—a motion sensor and a position sensor—along with a controller to determine both the location of an object and any movement of that object within a “virtual input location” in three-dimensional space surrounding the machine.

For example, the Wells Patents explicitly teach the use of multiple different sensors to determine location and movement in this three-dimensional space, including lower power Doppler radar sensors, ultrasonic sensors, IR cameras, cameras, and infrared/laser scan sensors. ('584 Patent at 2:39-45). The Wells Patents also explain exactly how these sensors work together to provide the patents' concrete, technological solutions to the problems in the prior art. *See, e.g., id.* at 2:46-60 (explaining parts of the patented system with Doppler radar theory); 3:4-12 (explaining how ultrasonic sensors, which utilize sonar signals, work along with radar signals in the patented system); 3:19-31 (explaining different configurations of Doppler radar used in the patented system); 4:33-41 (discussing the patented system's use of an IF frequency signal to determine distance and velocity); 5:4-6 (explaining the patented system's use of ultrasonic sensors); 5:11-12 (explaining that the patented system's use of multiple sensor devices and angulation improves resolution and accuracy); 5:53-58 (explaining how the patented system compensates for any limitations of Doppler radar sensors and ultrasonic sensors); 7:12-19 (explaining where the Doppler radar sensor and the ultrasonic sensor can be placed in the patented system); 8:20-25 (discussing the patented system's use of an IR camera sensor); 8:32-

40 (explaining how the IR emitter array works to detect a reflection of a human eye); and 8:51-61 (explaining the use of an infrared laser scan sensor).

The claims of the Wells Patents reflect these concrete, technical solutions. For example, claim 1 of the ‘584 Patent sets forth a specific and concrete apparatus consisting of (1) a position sensing device for determining a location of a user input actuator at a virtual input location, (2) a motion sensing device including an electromagnetic transceiver module for detecting motion at the virtual input location, and (3) a controller coupled to the position sensing device and the motion sensing device, the controller determining whether a portion of the user input actuator is within the virtual input location in space defining the virtual input. The dependent claims—which LG has not addressed at all—add even more specific and concrete details to the apparatus of Claim 1. *See, e.g.*, Claims 3 (requiring the electromagnetic transceiver module to be a Doppler radar sensor); 6 (requiring the Doppler radar sensor to be configured for frequency modulated continuous wave operation); 7 (restricting the beam width of the Doppler radar sensor between fifteen and twenty degrees); 9 (requiring the camera sensor module to comprise an infrared emitter and an infrared camera); 11 (requiring the ultrasonic sensor module to include ultrasonic transceivers); 12 (requiring the ultrasonic sensor module to operate in a range between 38 kHz and 80 kHz); 13 (requiring the position sensing device to include an infrared laser scan sensor); and 20 (requiring the position sensing device to be an optical sensor).

The Federal Circuit has consistently found patents with such concrete, technological solutions to prior art problems to not be directed to an abstract idea. *Data Engine Tech. LLC v. Google, LLC*, No. 2017-1135, 2018 WL 4868029 (Fed. Cir. Oct. 9, 2018); *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356 (Fed. Cir. 2018); *Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253 (Fed. Cir. 2017). For instance, the Federal Circuit’s recent

opinion in *Data Engine Tech.* is instructive. 2018 WL 4868029 at \*2. The patents-at-issue in *Data Engine Tech.* addressed using a “notebook-tabbed interface, which allows users to easily navigate through three-dimensional electronic spreadsheets.” *Id.* at \*2. In their description of the prior art, the patents explained how spreadsheets were difficult to use and navigate, meaning users typically only mastered a small fraction of the available features. *Id.* at \*1. The district court granted the defendant’s motion for judgment on the pleadings, holding that the patents were directed to the abstract idea of “using notebook-type tabs to label and organize spreadsheets.” *Id.* at \*4. The Federal Circuit reversed, holding that the patents do not recite the abstract ideas of generically navigating, labeling, or organizing spreadsheets, but rather “require a specific interface and implementation for navigating complex three-dimensional spreadsheets using techniques unique to computers.” *Id.* at \*6. The court also highlighted the fact that the patents “solved [the] known technological problem in a particular way,” which allowed rapid and easy access to the information on the different spreadsheets. *Id.*

The same reasoning applies here. The Wells Patents identify problems with the prior-art machines designed to “interact” with human beings, such as size limitations, the inability to work in three-dimensional space, and surface limitations. Then, the Wells Patents provide a “specific interface and implementation” for addressing these problems, including the aforementioned use of Doppler radar sensors, ultrasonic sensors, IR camera sensors, and infrared laser scan sensors. This solution solved a known technological problem in a particular way, which allowed the implementation of advanced human-machine interaction.

LG’s arguments that the Wells Patents are directed to an abstract idea are based primarily on mischaracterizing and over-generalizing the Wells Patents and what they claim in an attempt to force-fit the facts here into the decisions cited in LG’s motion. (Mtn. at 12-14) (arguing, for

example, that the claims are “directed to the abstract idea of gathering data and processing that data” and that the supposed “functions” in the claims identified by LG “can be performed by human thought alone.”)<sup>2</sup> But these caricatures of what the Wells Patents actually claim is what the Federal Circuit expressly cautioned against in *Enfish, LLC v. Microsoft, Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) (“The ‘directed to’ inquiry, therefore, cannot simply ask whether the claims involve a patent-ineligible concept.”). Instead of analyzing what the Wells Patents are actually directed to, LG uses the improper approach of molding the facts to fit court decisions on unrelated patents.

#### B. The Wells Patents Disclose Several Inventive Concepts Under Step Two

Under *Alice* step two, even if somehow the Wells Patents were directed to an abstract idea under Federal Circuit precedent (they are not), the Wells Patents disclose several inventive concepts that ensure patent-eligibility. For example, additional inventive concepts include the concept that using multiple different sensors controlled by a single controller can provide accurate position detection and motion detection in a three-dimensional space surrounding a machine. (‘584 Patent at 2:39-45). The Wells Patents explain exactly how these sensors work together to provide the patents’ concrete, technological solutions to the problems in the prior art. *See, e.g., id.* at 3:4-12 (explaining how ultrasonic sensors, which utilize sonar signals, work with radar signals in the patented system); 4:33-41 (discussing the patented system’s use of an IF frequency signal to determine distance and velocity); 5:11-12 (explaining that the patented

---

<sup>2</sup> LG also states that “the Wells patents are similar to claims that the Federal Circuit has held to be an abstract idea in part because they use function-based claiming.” (Mtn. at 13) (citing *Two-Way Media Ltd. v. Comcast Cable Commc’ns, LLC*, 874 F.3d 1329 (Fed. Cir. 2017)). But LG does not in any way explain how the claims of the Wells patents are similar to the claims found to be directed to an abstract idea in *Two-Way Media*. To the extent LG is arguing that the Federal Circuit has held that function-based claiming is somehow *ipso facto* directed to an abstract idea, the Federal Circuit has done no such thing.

system's use of multiple sensor devices and angulation improves resolution and accuracy); 5:53-58 (explaining how to compensate for any limitations of Doppler radar sensor and ultrasonic sensor); 7:12-19 (explaining where the Doppler radar sensor and the ultrasonic sensor can be placed in the patented system); 8:20-25 (discussing use of an IR camera sensor); and 8:32-40 (explaining how the IR emitter array works to detect a reflection of a human eye in the patented system).

Indeed, the Wells Patents enable LG's smartphones to have a technology where, using a specific combination of sensors and a controller, the phones can determine location and movement in a specific three-dimensional context. For example, the accused LG device is able to determine a user's location, find their eyes in space, and detect motion of the user's hand to automatically take the user's picture.

In the face of the detailed specifications of the Wells Patents and their own products' use of this technology, LG nonetheless argues that there is no "inventive concept" in the patents because the required devices "are all generic and thus do not provide any inventive concept." LG cites to no evidence that the claimed position sensor, motion sensor, and controller are generic. Nor does LG support its contention that the devices are arranged in a "conventional" manner. In short, the evidence that the Wells Patents include an inventive concept plainly outweighs LG's unsupported attorney argument.

#### C. LG Inappropriately Analyzes Only One Claim Per Patent

LG also inappropriately only analyzes three claims (one claim per patent), without providing any justification for using a single representative claim per patent. As noted above in Section IV.A, the dependent claims, which LG has not addressed, add even more specific and



concrete details to the apparatus of Claim 1. LG has provided no logical or legal basis for its failure to address the dependent claims.

D. LG's Cases are Inapposite

The four relevant cases that LG cites from the Federal Circuit and from this district all dealt with software claims—in contrast to the claims of the Wells Patents, which use particular hardware in a novel fashion. (Mtn. at 13-14) (citing *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1351 (Fed. Cir. 2016) (software claims related to “performance monitoring of an electric power grid by collecting data from multiple data sources, analyzing the data, and displaying the results”); *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1367-68 (Fed. Cir. 2011) (software claims related to “determin[ing] whether an Internet address relating to a particular transaction is consistent with other Internet addresses that have been used in transactions utilizing the same credit card.”) (internal citation omitted); *Two-Way Media Ltd. v. Comcast Cable Commc’ns, LLC*, 874 F.3d 1329, 1333 (Fed. Cir. 2017) (software claims related to “streaming audio/visual data over a communications system like the internet”); *Cellular Commc’ns Equip. v. AT&T Inc.*, No. 2:15-cv-00576-RWS-RSP, 2017 WL 2984074, at \*4 (E.D. Tex. June 27, 2017) (software claims related to “power headroom reporting”)). As a result, those cases are inapposite to analysis of the device claims in the Wells Patents.

E. Fact Issues Preclude Dismissal on the Pleadings

American Patents’ pleadings regarding the innovative nature of the Wells Patents raise questions of fact that preclude dismissal at this pleadings stage. See *Berkheimer v. HP Inc.*, 890 F.3d 1369, 1371 (Fed. Cir. 2018) (“*Berkheimer II*”). Among other things, the specifications of the Wells Patents contain copious evidence that various aspects of the Wells Patents were not “well-understood, routine, or conventional.” Consequently, dismissal at the pleadings stage

would be improper. *See Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1125 (Fed. Cir. 2018) (vacating patent eligibility dismissal under Rule 12(b)(6) and reversing denial of motion to amend complaint). And, to the extent the Court disagrees, American Patents could amend its complaint to add further examples that demonstrate that none of the elements that LG calls “routine” (with no evidentiary support whatsoever) are in fact routine.

## **V. AMERICAN PATENTS SUFFICIENTLY PLEADED INDIRECT INFRINGEMENT**

American Patents has also plausibly alleged indirect infringement. LG argues that the complaint’s indirect infringement allegations are “threadbare recitals” of the elements that are “supported by mere conclusory statements.”<sup>3</sup> (Mtn. at 14). For example, LG argues that American Patents has not plausibly alleged inducement because American Patents has not “identif[ied] specific examples or actions taken by LGE to advertise, direct, or instruct users to use the accused products in an infringing manner.” (Mtn. at 15). But American Patents specifically pleaded that LG committed acts of inducing infringement, including, for example, “distributing instructions that guide users to use the products in an infringing matter.” (Dkt. 1 at ¶ 72). That alone is sufficient. *See, e.g., Cywee Group Ltd. v. Huawei Device Co. Ltd.*, No. 2:17-cv-495, 2018 WL 3819392, \*2 (E.D. Tex. Aug. 10, 2018) (Bryson, J., by designation) (holding that allegation that “Huawei provides manuals and instructions . . . and/or provides instructional and support materials on its website that teach and instruct its customers to operate those products in ways that practice the claimed invention” was sufficient to plead induced infringement for period in which Huawei had knowledge of the patents-in-suit); *Swipe*

---

<sup>3</sup> LG also complains of the “generic nature of the indirect infringement allegations” as supposedly demonstrated by their being “copied verbatim in each of the eleven complaints American Patents filed with the Court.” (Mtn. at 17). LG does not cite a single case where a court looks to a complaint in *another* case to decide a 12(b)(6) motion.

*Innovations, LLC v. Ingenico Corp.*, No. 9:12-cv-127-RC, 2013 WL 12142379, \*3 (E.D. Tex. Jan. 3, 2013) (holding inducement was adequately pleaded by allegations that defendants engaged in the steps of “advising and directing [of] customers [to infringe using accused instrumentalities],” “advertising or promoting the use [of accused instrumentalities to infringe],” and “distributing instructions that guide users to use the [accused instrumentalities to infringe]).

LG next complains about certain inducement facts being plead “in the alternative.” (Mtn. at 15). But American Patents is entitled to plead in the alternative, as is any plaintiff. Not surprisingly, LG provides no authority to the contrary. *See Light Transformation Technologies, LLC v. Light Science Group Corp.*, No. 2:12–CV–826–MHS–RSP, 2014 WL 935354, \*2 (E.D. Tex. 2014) (“While GE asserts that the use of the phrase[] . . . ‘and/or’ render[s] the complaint insufficient under the rules, GE fails to provide any persuasive argument that the law requires that outcome here.”)

Next, LG turns to the complaint’s allegations of contributory infringement, claiming these allegations are insufficient. (Mtn. at 16-17). LG first argues that American Patents improperly alleges that the accused products have “special features” that have no substantial non-infringing uses. *Id.* at 16 n.2. According to LG, “the question is not whether the special features meet those requirements but whether the accused devices as a whole meet those requirements.” *Id.* That is wrong. The Federal Circuit has made clear that a special feature of an accused product can be the basis of a contributory infringement claim. *See, e.g., Ricoh Co., Ltd. v. Quanta Computer Inc.*, 550 F.3d 1325, 1337 (Fed. Cir. 2008) (holding that one cannot “escape liability as a contributory infringer merely by embedding [the infringing component] in a larger product with some additional, separable feature before importing it and selling it”); *see also i4i Ltd. P’ship v. Microsoft Corp.*, 670 F.Supp.2d 568, 578 n.5 (E.D. Tex. 2009).

LG also argues that American Patents’ allegations are “threadbare recitals” of the required elements. (Mtn. at 17). But American Patents specifically pleaded that the accused products have special features that have no substantial use other than uses that infringe American Patents’ patents. (Dkt. 1 at ¶ 74). And American Patents provided examples of such special features—initiation and/or control of Internet streamed content and advanced virtual input—used in a manner that infringes the claims of the patents-in-suit. *Id.* LG says that American Patents only “defin[es] the allegedly infringing component as ‘features that infringe,’” which according to LG “does not give fair notice of what the allegedly infringing component is.” (Mtn. at 17). But American Patents’ contributory infringement pleading plainly refers to two specific accused features of the accused products. LG simply ignores that those features were identified earlier in the complaint. *See, e.g.*, Dkt. 1 at ¶ 18 (identifying LG’s G7 ThinQ product as one of LG’s “products and/or systems that allow for initiation and/or control of Internet streamed content”).

Finally, LG argues that the complaint’s indirect infringement allegations as to pre-suit conduct should be dismissed because “the complaint includes no allegations to support a claim of indirect infringement prior to the filing of this suit.” (Mtn. at 18). But American Patents plausibly alleged that LG was willfully blind to the existence of the asserted patents before the suit was filed, and an allegation of willful blindness is an allegation of knowledge. *See Glob.-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754, 770 (2011). As LG acknowledges, American Patents pleaded that LG had “a policy or practice of not reviewing the patents of others (*including instructing its employees to not review the patents of others*), and thus has been willfully blind of American Patents’ patent rights” in the pre-suit period. *Id.* (emphasis added). American Patents alleged knowledge in the pre-filing period because it believes that discovery will show that LG affirmatively instructed its employees to avoid reading the patents of others.

And American Patents has good reason to believe this: as Professor Mark Lemley has explained, companies like LG are notorious for adopting such policies:

*Virtually everyone does it. They do it at all stages of endeavor. Companies and lawyers tell engineers not to read patents in starting their research, lest their knowledge of the patent disadvantage the company by making it a willful infringer. . . . This intentional ignorance of patent rights in the hands of others has led some to label major manufacturers in the IT industries “patent pirates.”*

*See, e.g.,* Ex. 2 at 21-22 [M. Lemley, “Ignoring Patents,” 2008 Mich. St. L. Rev. 19 (2008)]

(emphasis added).<sup>4</sup> That is sufficient at the pleading stage. *See* Fed. R. Civ. P. 11(b)(3)

(allowing allegations of fact on information and belief if they “will likely have evidentiary support after reasonable opportunity for further investigation or discovery”).

Indeed, based on the same facts, this Court has previously denied a motion to dismiss the same allegation. *See Script Security Solutions L.L.C. v. Amazon.com, Inc.*, 170 F. Supp.3d 928, 938 (E.D. Tex. 2016) (Bryson, J., by designation) (“Taking all inferences in Script’s favor, it has pleaded that defendant took an affirmative action to avoid gaining knowledge of the patents in

---

<sup>4</sup> *See also* Edwin H. Taylor & Glenn E. Von Tersch, *A Proposal to Shore Up the Foundations of Patent Law that the Underwater Line Eroded*, 20 Hastings Comm. & Ent. L.J. 721, 737 (1998) (“As matters now stand many companies discourage employees from reading patents. This presumably lessens the chance that the company will be found to have knowledge of a patent.”); Dennis Fernandez, *Move Over Letterman: Top 10 Most Common IP Management Mistakes for New Companies*, Pat. Strategy & Mgmt., July 1, 2003, at 3 (“Additionally, in many cases it may be appropriate for companies, as a matter of policy, to discourage looking at issued patents owned by other entities so as to avoid awareness of potentially infringing patents.”); Mark A. Lemley & Ragesh K. Tangri, *Ending Patent Law’s Willfulness Game*, 18 Berkeley Tech. L.J. 1085, 1100-01 (2003) (“[I]n-house patent counsel and many outside lawyers regularly advise their clients not to read patents if there is any way to avoid it. What you do know will certainly harm you, they reason, so it is generally better not to know. Thus, from the perspective of a potential infringer, ignorance is bliss.”); Timothy B. Lee, *It’s Normal for Software Companies to Ignore Patents*, Forbes Contributor post (2/27/2012) (“[A]lmost all software companies ignore their competitor’s patents.”); Tom Krazit, *Why Tech Companies Want Engineers To Ignore Patents When Designing Products*, Gigaom, Nov. 2, 2011 (“[S]everal companies in the tech industry actively discourage their engineers from thinking about whether concepts and products under development might have already been patented . . . .”) (emphasis added).

suit—ignoring all patents as a matter of policy. . . . Script has sufficiently pleaded inducement . . . .”) (emphasis added); *but see Nonend v. Apple, Inc.*, Case No. 2:15-cv-00466-JRG-RSP, 2016 WL 1253740, \*2-3 (E.D. Tex. Mar. 11, 2016).

## **VI. AMERICAN PATENTS SUFFICIENTLY PLEADED WILLFULNESS**

According to LG, American Patents’ willfulness allegations should be dismissed because they supposedly provide only “conclusory statement[s]” of willful infringement and do not “allege that LGE had knowledge of the asserted patents prior to the filing of this suit.” (Mtn. at 19). LG’s arguments are wrong—American Patents plausibly alleged willful infringement, and pre-suit knowledge is not required to state a claim for willfulness. And even if pre-suit knowledge were required, American Patents has adequately alleged such knowledge.

### **A. American Patents Plausibly Alleged That LG Intentionally Infringed**

American Patents plausibly alleged willful infringement by LG. Willfulness requires proof that the defendant “actually knew or should have known that its actions constituted an unjustifiably high risk of infringement.” *Arctic Cat Inc. v. Bombardier Recreational Products Inc.*, 876 F.3d 1350, 1371 (Fed. Cir. 2017) (rejecting challenge to jury instruction on willfulness). The complaint alleged that LG had knowledge of the patents, that LG’s customers are directly infringing, and that LG has encouraged (and continues to encourage) them to infringe. (Dkt. 1 at ¶¶ 11-12, 25, 36, 47, 58, 69, 72-77). These allegations are sufficient to state a claim for willful infringement at the pleading stage. *See, e.g., Script Sec. Sols. L.L.C. v. Amazon.com, Inc.*, 170 F. Supp.3d 928, 939 (E.D. Tex. 2016) (Bryson, J., by designation) (rejecting argument that plaintiff failed to plead facts showing that defendants’ “actions constituted an unjustifiably high risk of infringement” because plaintiff “has pleaded knowledge

of the patent, that defendants’ customers are infringing, and that the defendants encouraged this infringement”).

LG suggests that American Patents’ allegations are flawed because they do not show “egregious” behavior. (Mtn. at 18). But whether infringing conduct was sufficiently “egregious” is not an element of willful infringement at all. Instead, “egregiousness” is for the court to consider in exercising its discretion to enhance damages after the jury’s finding of willfulness. *See Ericsson Inc. v. TCL Communication Tech. Holdings, Ltd.*, 2018 WL 2149736, at \*8 (E.D. Tex. 2018) (“the jury must decide whether the infringement was *intentional*, and then the court must decide whether the intentional conduct was *egregious* enough to justify enhanced damages”) (emphasis added).

*Halo* did state that enhanced damages awards are meant to be a “sanction for egregious infringement behavior.” 136 S. Ct. at 1932. But that does not mean egregiousness is an element of willful infringement. Indeed, “*Halo* emphasized that subjective willfulness alone—i.e., proof that the defendant acted despite a risk of infringement that was either known or so obvious that it should have been known to the accused infringer” is sufficient to establish willfulness and allow the court to consider enhancing damages. *Arctic Cat Inc. v. Bombardier Recreational Products Inc.*, 876 F.3d 1350, 1371 (Fed. Cir. 2017) (internal quotes omitted). For that reason, in *Ericsson* this Court rejected a defendant’s challenge to the jury’s willfulness verdict specifically because the defendant’s “assumption that a jury’s willfulness finding cannot stand without egregious or shocking infringement behavior is inconsistent with the Federal Circuit’s decision in *Arctic Cat*.” *Ericsson*, 2018 WL 2149736, at \*9.

#### B. Pre-Suit Knowledge Is Not Required to State a Claim for Willfulness

LG also argues that American Patents’ willful infringement allegation is flawed because,

according to LG, willful infringement must be based on pre-suit knowledge of the patents. (Mtn. at 19). That is not the law: “there is nothing in *Halo* suggesting that pre-suit knowledge is required for willfulness. . . . Culpability can arise pre- or post-suit.” *Huawei Techs. Co. v. T-Mobile US, Inc.*, No. 2:16-CV-00052-JRG-RSP, 2017 WL 1129951, at \*4 (E.D. Tex. Feb. 21, 2017), *adopted*, No. 2:16-CV-52-JRG-RSP, 2017 WL 1109875 (E.D. Tex. Mar. 24, 2017); *see also Plano Encryption Tech., LLC v. Alkami Tech., Inc.*, No. 2:16-cv-1032-JRG at 13 (E.D. Tex. Sept. 22, 2017) (“[A]n allegation that a defendant continues its allegedly infringing conduct even after receiving notice of a complaint is sufficient to at least state a claim for willful infringement.”).

For these reasons, even if the complaint contained no pre-suit knowledge allegations, American Patents has stated a claim for willfulness by pleading that the complaint put LG on notice of the patents and that LG’s infringement is ongoing. (Dkt. 1 at ¶¶ 18, 19, 25, 30, 31, 36, 41, 42, 47, 52, 53, 58, 63, 64, 69, 72-77). No more is required. *See, e.g., Blitzsafe Texas, LLC v. Volkswagen Grp. of Am., Inc.*, No. 215-CV-1274-JRG-RSP, 2016 WL 4778699, at \*7 (E.D. Tex. Aug. 19, 2016) *adopted* No. 2:15-CV-1274-JRG-RSP, 2016 WL 4771291 (E.D. Tex. Sept. 13, 2016) (“The Court also finds the complaint states a claim to post-suit willful infringement... The complaint alleged that despite these facts, the [] Defendants have not ceased their infringing activities.”); *see also WordCheck Tech, LLC v. Alt-N Techs., Ltd.*, No. 6:10-cv-457, Dkt. 755, at 3 (E.D. Tex. July 17, 2012) (holding that an allegation of notice of the patents-in-suit and that continued infringement would be willful is sufficient at the pleading stage).

C. Even If Pre-Suit Knowledge Is Required, It Was Adequately Alleged Here

Even if LG were correct about the law, LG would still lose because American Patents has adequately pleaded pre-suit knowledge for all of the asserted patents. As LG acknowledges (and



as explained in more detail in Section V, *supra*), American Patents pleaded that LG had “a policy or practice of not reviewing the patents of others (including instructing its employees to not review the patents of others), and thus has been willfully blind of American Patents’ rights under the patents.” (Mtn. at 18). That is sufficient at the pleading stage. *See* Fed. R. Civ. P. 11(b)(3) (allowing allegations of fact on information and belief if they “will likely have evidentiary support after reasonable opportunity for further investigation or discovery”); *see also Blitzsafe Texas*, 2016 WL 4778699, at \*6 (discussing applicability of willful blindness to allegations of pre-suit willful infringement).

## **VII. IF NECESSARY, LEAVE TO AMEND SHOULD BE GRANTED**

To the extent that the Court rules that any of American Patents’ claims are not adequately pleaded, American Patents requests an opportunity to amend its complaint to address any deficiencies that the Court finds, or, at a minimum, to incorporate its P.R. 3-1 infringement contentions by reference once those are submitted. “The court should freely give leave [to amend] when justice so requires.” Fed. R. Civ. P. 15(a); *SGIC Strategic Global Inv. Capital, Inc. v. Burger King Eur. GmbH*, 839 F.3d 422, 428 (5th Cir. 2016) (finding an abuse of discretion for the district court’s failure to grant leave to amend and explaining “the language of this rule evinces a bias in favor of granting leave to amend, and “[a] district court must possess a substantial reason to deny a request.”) (citations and internal quotations omitted). “[T]he Rule ‘evinces a bias in favor of granting leave to amend.’” *Potter v. Bexar County Hosp. Dist.*, 195 Fed. App’x 205, 208 (5th Cir. 2006) (quoting *Dussouy v. Gulf Coast Inv. Corp.*, 660 F.2d 594, 597 (5th Cir. 1981)). “The policy of the federal rules is to permit liberal amendment to facilitate determination of claims on the merits and to prevent litigation from becoming a technical

exercise in the fine points of pleading. Thus, unless there is a substantial reason to deny leave to amend, the discretion of the district court is not broad enough to permit denial.” *Id.*

### VIII. CONCLUSION

For the foregoing reasons, the Court should deny LG’s Motion.

Dated: January 18, 2019

Respectfully submitted,

/s/ Zachariah S. Harrington

Matthew J. Antonelli

Texas Bar No. 24068432

matt@ahtlawfirm.com

Zachariah S. Harrington

Texas Bar No. 24057886

zac@ahtlawfirm.com

Larry D. Thompson, Jr.

Texas Bar No. 24051428

larry@ahtlawfirm.com

Christopher Ryan Pinckney

Texas Bar No. 24067819

ryan@ahtlawfirm.com

Michael D. Ellis

Texas Bar No. 24081586

michael@ahtlawfirm.com

ANTONELLI, HARRINGTON

& THOMPSON LLP

4306 Yoakum Blvd., Ste. 450

Houston, TX 77006

(713) 581-3000

Stafford Davis

State Bar No. 24054605

sdavis@stafforddavisfirm.com

Catherine Bartles

Texas Bar No. 24104849

cbartles@stafforddavisfirm.com

THE STAFFORD DAVIS FIRM, PC

The People’s Petroleum Building

102 N College Ave., 13th Floor

Tyler, Texas 75702

(903) 593-7000

*Attorneys for American Patents LLC*